



Intel® 852GME Interactive Client Reference Design with Intel® Pentium® 4 Processor

Product Overview

The Intel® 852GME Interactive Client Reference Design provides design engineers with a starting point for today's newest and most sophisticated interactive client applications, including kiosk, Point-of-Sale (POS), ATM, and gaming devices. It delivers performance scalability, high integration, best-in-class multimedia performance, and advanced hardware management, while the EmbeddedATX form factor is ideal for developing products that meet a variety of customer needs.

This reference design features a 478-pin socket that supports the Intel® Pentium® 4 processor in the FC-PGA2 package. The Intel Pentium 4 processor, with Intel® NetBurst® microarchitecture, combines the latest in processor design and state-of-the-art manufacturing to deliver excellent price/performance for interactive client applications.

Based on the Intel 852GME chipset, this reference design helps developers implement new features in a cost-effective way, including integrated flat panel support, dual independent display, remote manageability, on-board audio, and Trusted Platform Module (TPM) support. It includes complete documentation for board development to help reduce time-to-market and lower the total cost of development.

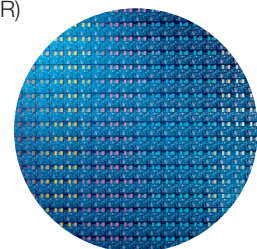
Product Highlights

- Scalable Intel Pentium 4 processor performance with clock speeds of 2.0 GHz, 2.4 GHz, 2.6 GHz, and higher
- Intel 852GME chipset with ICH4
 - Support for processors with 400 and 533 MHz front-side bus
 - Up to 2 GB DDR-DRAM with ECC support (2 DIMMs)



- Intel® Extreme Graphics controller with Dynamic Video Memory Technology (DVMT)
- Integrated LVDS controller
- Multiple display interface options: LVDS, DVI, or VGA
- Dual independent display
- Triple-option LAN controller footprint
 - Intel® 82551QM (10/100 Ethernet with ASF)
 - Intel® 82540EM (Gigabit Ethernet)
 - Intel® 82562EZ (10/100 Ethernet on LCI bus)
- EmbeddedATX PCI riser card
 - Single-slot, low-profile PCI
- Expanded I/O connector support
 - VGA and DVI connectors
 - Six USB 2.0/1.1 ports including two powered USB
 - Audio (line-in, headphone, mic)
 - LAN connector (RJ-45)
 - Four powered serial ports (+12V, 16550 compatible)
 - One parallel port (RS-485)
 - PS/2 keyboard, mouse ports
- Interactive client system features
 - Flat panel backlight controller
 - TPM
 - On-board 2W audio amplifier
- Chassis intrusion detection connector
 - National LM85* system controller with fan tachometer
 - IrDA header (CIR/SIR)

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- Advanced BIOS support
 - Wired for Manageability (WfM) including PXE, wake-on-LAN, and Alerting Standard Format (ASF) 1.0
 - Headless operation (no keyboard or mouse required)
 - ACPI and thermal monitoring
 - Chassis intrusion detection

Included in Reference Design

- User's manual
 - Schematics
 - Bill of materials
 - Device drivers
 - Windows® XP Embedded configuration file
- (A limited number of EmbeddedATX evaluation boards with processor and memory are available. Please contact your Intel sales representative for information.)

Benefits to Developers

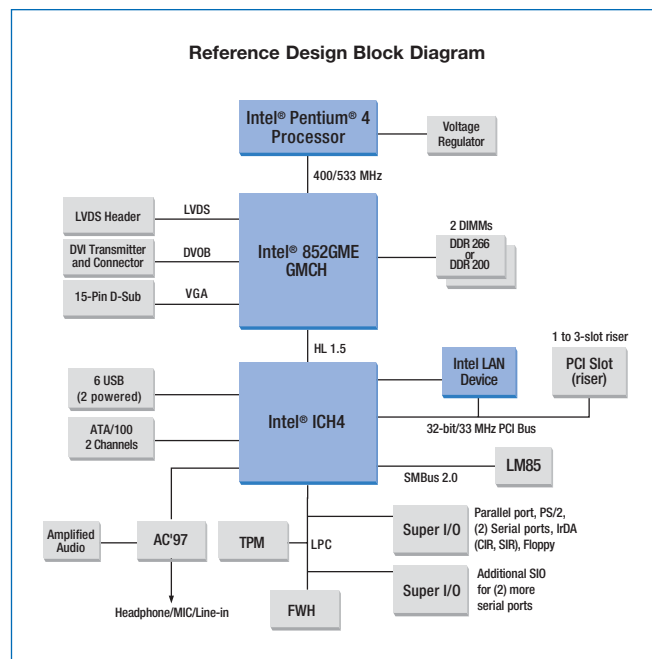
This and other Intel reference designs may be used off-the-shelf as a market-ready design, or customized to support additional value-added features. This allows developers to focus technical resources on strategic product innovation and customized applications, in order to accelerate time-to-market while reducing some of the risks of hardware development.

Intel's growing family of interactive client reference designs can help provide these key benefits:

- Accelerated and economical implementation of leading-edge technologies

- Shortened platform selection and design cycle
- Simplified customization with scalable and flexible platforms
- Extended component life cycles and broad software application support

The Intel 852GME Interactive Client Reference Design is available for download from: http://developer.intel.com/design/intarch/platforms/iaclient/reference_configs.htm. Solutions based on this reference design may be obtained from companies listed on this Web site.



Intel Access

Developer's Site:

developer.intel.com

Embedded Intel® Architecture Home Page:

developer.intel.com/design/intarch

EmbeddedATX Motherboard Interface Specifications:

developer.intel.com/info/embatx

Intel® Technical Documentation Center:

www.intel.com/go/techdoc

(800) 548-4725 7 a.m. to 7 p.m. CST (U.S. and Canada)

International locations please contact your local sales office.

General Information Hotline:

(800) 628-8686 or (916) 356-3104 5 a.m. to 5 p.m. PST

For more information, visit the Intel Web site at: developer.intel.com

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